**.INSTRUCTION MANUAL** 

PRELIMINARY GEK-24903

# AF-3061 & AF-3121 INVERTER DRIVE SYSTEM S A-C ADJUSTABLE-SPEED DRIVE

INSTALLATION

**OPERATION** 

TROUBLESHOOTING



#### **INVERTER AF3061**

### ABBREVIATED START-UP PROCEDURE

If any difficulties are encountered during start-up and checkout, refer to Section 4 of instruction book for detailed start-up and checkout procedure.

#### WARNING

## ELECTRIC SHOCK CAN CAUSE PERSONAL INJURY OR LOSS OF LIFE. WHETHER THE A-C SUPPLY IS GROUNDED OR NOT, HIGH VOLTAGES TO GROUND WILL BE PRESENT AT MANY POINTS THROUGHOUT THE DRIVE. CHARGED CAPACITORS REQUIRE ONE MINUTE DISCHARGE TIME.

- 1. Verify that the 3-phase a-c power input to the drive is of the proper value as listed on the equipment data nameplate (-5,+10%).
- 2. <u>Verify</u> that cables P1 are <u>disconnected</u> and separated from conducting objects, from all 3 Phase Modules. Apply three phase a-c power to the Inverter, "POWER ON" indicator illuminates.

#### CAUTION

CHECK FOR PROPER AIR FLOW OF THREE PHASE BLOWER MOTOR (IF SUPPLIED). BLOWER ROTATION MUST BE COUNTER-CLOCKWISE LOOK-ING INTO BLOWER END. IF ROTATION IS INCORRECT, INTERCHANGE ANY TWO A-C SUPPLY LEADS TO BLOWER MOTOR.

- 3. Press the Inverter "START" pushbutton; "INVERTER ON" indicator illuminates (if supplied). "RESET" indicator (if supplied) should not be illuminated.
- 4. With the "Test" card in test socket "B" and the oscilloscope connected to "Read" apply a 10% to 20% speed reference command and verify that firing signals are present on 1B through 12B selector positions. Scope settings are: 5v/cm and 5 milli-sec/cm.
- 5. Press "INVERTER STOP/RESET" pushbutton. "INVERTER ON" indicator extinguishes.
- 6. Switch off or disconnect three phase input power to Inverter unit, "POWER ON" indicator extinguishes. <u>Check</u> that capacitors have discharged.
- 7. Connect P1 cables on all three phase modules.
- 8. Set "Speed Control" potentiometer to zero.
- 9. Apply three phase a-c power to the Inverter Unit. Verify that the "POWER ON" indicator is illuminated.
- 10. Press the Inverter "START" pushbutton; "INVERTER ON" indicator illuminates (if supplied).
- 11. Increase the "Speed Control" potentiometer until motor base speed is reached.